

REMARKS

In the final Office Action dated February 9, 2006, Claims 12, 13, 15-18, 20, and 22 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,911,121 to Andrews ("Andrews"). Claim 19 was rejected under 35 U.S.C. § 103(a) as being obvious over Andrews. Claims 14 and 21 were objected to as being dependent upon a rejected base claim, but would otherwise be allowable if rewritten in independent form. In response to the final Office Action, Applicant has amended Claims 12, 13, 15, 20, and 22. Applicant has also added new Claims 23-33. In view of the following remarks, Applicants respectfully request reconsideration and allowance of all of the pending claims of the present application.

1. Summary of the Invention Claimed in Claims 12-33

In general terms, the claimed invention is directed to a user exchangeable cover part for a wireless terminal that includes electrical circuitry for supporting a user interface of the wireless terminal. The user exchangeable cover can also include identification means for identifying each respective cover. In this way, embodiments of the present invention may allow an exchangeable cover to interact with the base transceiver portion of a wireless terminal even though all the functions may not be supported by both parts. *See* the Specification, page 5, lines 28-30. For example, in one embodiment, the electrical circuitry of the exchangeable cover part includes circuitry for supporting illumination means carried by the exchangeable cover. *See* the Specification, page 10, lines 30-31; and page 12, lines 21-27. In this embodiment, the electrical circuitry may be configured to receive a ring tone signal and illuminate the illumination means of the exchangeable cover based on the ring tone signal. Different covers could be designed with different illumination designs, thereby allowing a user to customize their terminal by purchasing new covers having varying features and functions.

In another embodiment, the cover portion of the wireless terminal can be exchanged by a user in order to change the type of user interface of the wireless terminal. *See, e.g.,* the Specification, page 10, lines 1-4. For example, the wireless terminal may have two exchangeable covers where one exchangeable cover has a conventional keypad and the other exchangeable cover has a joystick. *See* the Specification, page 9, lines 29-31. Such an

embodiment might allow a user to easily interchange one cover for the other so that the wireless terminal can have a conventional keypad when the wireless terminal is used as a phone and a joystick when the wireless terminal is used as a gaming device.

In some embodiments, the electrical circuitry in the exchangeable cover part comprises a processing device(s) and/or memory device(s) for supporting the user interface of the exchangeable cover. *See* the Specification, pages 9-10. In one such embodiment, the electrical circuitry includes a memory device configured to store music files or game executables to be downloaded to the wireless terminal. *See* the Specification, page 9, lines 22-29.

The exchangeable cover may further include an electrical connector that connects the exchangeable cover with the main portion of the wireless terminal. In one embodiment, the electrical connector is first used to send an identification signal to the wireless terminal identifying the exchangeable cover part and, thereafter, is used to transfer electrical signals between the electrical circuitry of the cover part and the circuitry of the wireless terminal.

2. Summary of the Andrews Reference.

The Andrews reference describes a method and apparatus configured to simplify the manufacture of a variety of different telephone models. *See* col. 3, lines 23-25. Specifically, the mobile telephone 10 of Andrews employs a common printed circuit board architecture which is used in a plurality of models with interchangeable front covers 44 for each of the various models. *See* col. 3, lines 24-27. The printed circuit board 46 is located on the mobile telephone separate from the interchangeable front cover and contains all of the circuitry needed for each of the various models. *See* col. 3, lines 27-29. Additionally, printed circuit board 46 includes a program memory 14 for storing a plurality of different program configurations corresponding to each available model. *See* col. 3, lines 29-31. The front cover 44 includes a program selector 60 which is sensed by a detection circuit 50 on the printed circuit board 46. *See* col. 3, lines 31-34. The detection circuit 50 generates a configuration signal that tells the microprocessor 12, located on the printed circuit board 46, which of the available program configurations to use. *See* col. 3, lines 34-36. Thus, the Andrews reference describes a method and apparatus for automatically configuring the control program by simply interchanging front covers 44. *See* col. 3, lines 36-40.

Andrews further describes how the printed circuit board 46 is designed to include all of the components and circuitry needed for each available model. *See* col. 5, lines 13-15. For example, if different keypads 18 are used on different models, then the printed circuit board 46 must be designed to include circuitry for each different keypad 18. *See* col. 5, lines 15-18; and FIGS. 6, 8, and 10. Similarly, if different models use different displays, then the printed circuit board 46 needs to include circuitry for driving each display 20. *See* col. 5, lines 18-20.

3. Andrews does not teach or suggest a user exchangeable cover part having electrical circuitry for supporting the user interface of the wireless terminal, wherein such circuitry comprises electrical circuitry in addition to or other than electrical circuitry included within a display screen, as recited by amended independent Claims 12, 15, and 22.

The final Office Action cites the display 20 as teaching the electrical circuitry of the exchangeable cover part of Claims 12, 15, and 22. However, as described above, the Andrews patent specifically states that “the printed circuit board 46 [which is not part of the front cover] contains all of the circuitry needed for each of the various phone models.” *See* col. 3, lines 28-30; and col. 5, lines 13-15 (emphasis added). Andrews further states that “if different models use different displays, then the printed circuit board 46 needs to include circuitry for driving each display 20.” *See* col. 5, lines 18-20.

Notwithstanding the fact that Andrews does not describe any electronics for the support of a display being included on the front cover, Claims 12, 15, and 22 have been amended to recite that the electrical circuitry included in an user exchangeable cover part for supporting a user interface of a wireless terminal comprises electrical circuitry in addition to or other than electrical circuitry included within a display screen. Note that the display driver is not electrical circuitry included in a display screen, since Andrews specifically states that circuitry for driving the display is contained on the printed circuit board and, therefore, separate from a display screen included on the front cover.

The final Office Action also cites the keypads 18 of Andrews as anticipating the electrical circuitry of the exchangeable cover part of Claims 12, 15, and 22. As described above, the Andrews reference provides an example where different phone models have different keypads

18. Andrews describes how, in such a case, the “the printed circuit board 46 must be designed to include circuitry for each different keypad 18.” *See* col. 5, lines 15-18. In this regard, Andrews describes how:

“FIG. 10 shows a plan view of a printed circuit board 46 which may be used with either one of the front covers 42 shown in FIGS. 6 and 8. The printed circuit board 46 includes a plurality of key contacts 48. The key contacts 48 are arranged to work with either the six-function keypad shown in FIG. [8] or the five-function keypad shown in FIG. 6.”

See col. 6, lines 47-53. Figure 10 shows how the printed circuit board includes key contacts that line up with each of the keys that may exist on the front cover of the phone depending on the type of front cover used. It appears from this configuration that when a key on the keypad is pressed, it mechanically presses the key contacts 48 on the printed circuit board. Thus, in Andrews, the portion of the keypad that is included on the front cover is purely mechanical and does not contain electrical circuitry in the front cover. This is consistent with the statements in Andrews claiming that all of the electrical circuitry for the various phone models is included on the printed circuit board.

The Advisory Action argues that it is inherent that the keypad described by Andrews includes conductive members on each key to contact each key contact. *See* the Advisory Action dated April 12, 2006. Notwithstanding the fact that Andrews never mentions any such conductive members, even if one could imagine a conductive member on the underside of each key of the keypad, such a design would not be necessary for the operation of the keypad, as required for a reference to inherently disclose particular subject matter. MPEP § 2112, IV. Although the keys may comprise a conductive portion on the bottom of each key, it is just as likely that the keypad is purely mechanical in nature and that the keys simply press a conductive portion of the key contact so that the conductive portion bends to touch another conductive portion of the key contact to complete the circuit. Furthermore, Andrews should not be read to inherently teach that which it expressly teaches against. In other words, Andrews should not be imagined to include electrical circuitry that is never actually described, especially when Andrews explicitly states that the main circuit board must include all of the electrical circuitry required for

support of each front cover. *See, e.g.*, col. 3, lines 24-40; col. 5, lines 13-20; and col. 6, lines 47-53.

Therefore, the Andrews patent does not teach or suggest a user exchangeable cover part having electrical circuitry for supporting the user interface of the wireless terminal, as recited by the independent claims of the present invention. Instead, as described above, Andrews specifically teaches the opposite: that all of the circuitry for various phone models must be included on the main circuit board of the phone. In fact, Andrews does not describe any electrical circuitry on the front cover, other than the program selector 60 used to identify the type of front cover. For at least the reasons described above, independent Claims 12, 15, and 22, as well as the claims that depend therefrom, are patentably distinct over Andrews and, therefore, should be in condition for allowance.

4. Andrews does not teach or suggest a user exchangeable cover part, as recited by independent Claims 12, 15, and 22.

In addition to the above distinctions, Andrews does not teach or suggest a “user exchangeable cover part” for a wireless terminal, as recited by the claims of the present application. The Andrews patent describes a removable front cover that is removable or exchangeable by the manufacturer or perhaps a retailer, and specifically describes the manufacturing and inventory benefits of the Andrews invention. *See* Andrews, col. 2, lines 11-18; col. 3, lines 24-25; col. 7, lines 35-37. The reference does not teach or suggest designing a front cover or any other exchangeable cover part to be exchangeable by a user, as recited by the claims of the present application. For this additional reason, independent Claims 12, 15, and 22, as well as the claims that depend therefrom, are patentably distinct over Andrews and, therefore, should be in condition for allowance.

5. Andrews does not teach or suggest the connector pins as claimed by dependent Claims 13 and 20.

Furthermore, with respect to amended dependent Claims 13 and 20, Andrews does not teach or suggest a connector pin that is used to: (1) sense a resistor value included in an identification means and, afterwards, (2) operate to permit electrical communication between

the wireless terminal and the electrical circuitry of the user exchangeable cover part, as recited by amended dependent Claims 13 and 20. The Office Action cites the jumper pins 64 of the program selector 60, of Andrews, as anticipating Claims 12 and 20. While Andrews does describe the jumper pins 64 as being used to identify the type of removable cover, Andrews does not describe using any of these same pins to transfer electrical signals between the wireless terminal and the electrical circuitry of the cover for supporting the user interface. In fact, as described above with respect to the independent claims, Andrews does not teach or suggest an exchangeable cover having any electrical circuitry for supporting the user interface of the wireless terminal. Therefore, it is not surprising that Andrews also does not teach or suggest any pins or connectors that are used to operate electrical circuitry in the exchangeable cover, wherein the electrical circuitry supports the user interface of the wireless terminal. For this additional reason, dependent Claims 13 and 20 are patentable over Andrews.

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Conclusion

In view of the remarks presented above, it is respectfully submitted that the claims of the present application are in condition for allowance. It is respectfully requested that a Notice of Allowance be issued in due course. The Examiner is requested to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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